

Notice of Allowability

Application No.

10/806,674

Examiner

Tuan C To

Applicant(s)

CHEN ET AL.

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/23/2004.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ The drawings filed on 23 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

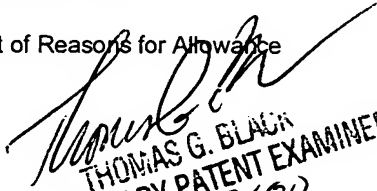
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 03/23/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3660

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

According to MPEP, 608.01(b), "the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited".

Authorization for this examiner's amendment was given in a telephone interview with Authorization for this examiner's amendment was given in a telephone interview with Marra Kathryn on 08/16/2004.

In the abstract, "The cutoff frequency is preferably selected to be the minimum frequency content associated with the FFT. A reset logic module clears an output of the limited-frequency integrator when a first condition occurs. The first condition is one of a straight-driving condition, a speed condition, and a sensor bias condition. The estimated side-slip velocity is compared to a desired side-slip velocity to produce a side-slip control signalThe side-slip control signal is combined with a yaw rate control signal to produce an actuator control signal. The actuator control signal is received by one of at least one brake actuator and a rear-wheel steering actuator to create a yaw moment to correct a dynamic behavior of the vehicle" has been deleted.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

This communication is an Examiner's reasons for allowance in response to application filed on 03/23/2004, assigned serial 10/806,674 and titled "Vehicle Stability Enhancement Control and Method."

The following is the Examiner's statement of reasons for the indication of allowable subject matter:

The prior art searching has been performed during the prosecution, however, none of the references has been found discloses or fairly suggests a side slip velocity estimation module for a vehicle stability enhancement control system/method that comprising "a limited-frequency integrator that integrates the estimated side-slip acceleration to determine an estimated side-slip velocity of the vehicle, said limited frequency integrator having a feedback loop, the feedback loop comprising a cutoff frequency; wherein the cutoff frequency is determined in relation to a speed of the vehicle and the estimated side-slip acceleration"

The examiner has recognized some prior art that are related to the system/method as said but do not disclose the limitation as stated above.

The reference to Banno et al. (U.S. '864A1) discloses a behavior control device for a vehicle that includes the teaching of side slip acceleration V_{yd} as shown in figure 2 of Banno et al, however, Banno et al. do not disclose a limited frequency integrator as recited in the independent claims of the present invention.

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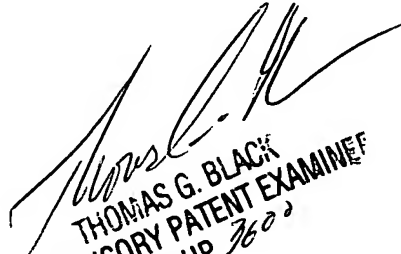
The reference to Akitaka (U.S. '920B1) is directed to a system for estimating a side-slip angle for a vehicle and monitoring the motion state of the vehicle. The side-slip angle is estimated by calculating side slip angular velocity on the basis of vehicle speed, lateral acceleration, and yaw rate. It is found that the reference to Akitaka does not disclose the limitation as stated above.

The examiner has found none of the references, either alone or in a combination, teaches or suggests the features as stated above. The prior art does not contain any teaching that would lead a skilled person to modify the closest prior art and thereby arrive at the invention. Therefore, the claimed invention is now patentable over the cited prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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SUPERVISORY PATENT EXAMINER
GROUP 3663

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tc

August 14, 2004


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GROUP 3663